

FORM PTO-1390
REV. 5-93US DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTORNEYS DOCKET NUMBER
P00,1147**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371**

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)

09/582543INTERNATIONAL APPLICATION NO.
PCT/EP98/08495INTERNATIONAL FILING DATE
29 December 1998PRIORITY DATE CLAIMED
29 December 1997

TITLE OF INVENTION

**"METHOD AND SYSTEM FOR CONTROLLING AN OPERATOR INTERFACE WITH DISPLAY
FIELDS CONTAINING GRAPHICS AND TEXT"**

APPLICANT(S) FOR DO/EO/US

Karola SCHEIDIG

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay.
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☐ have not been made and will not be made.
8. ☒ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern other document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98; (PTO 1449, Prior Art, Search Report).12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.
(SEE ATTACHED ENVELOPE)13. ☒ A FIRST preliminary amendment.
☐ A SECOND or SUBSEQUENT preliminary amendment.14. ☐ A substitute specification.15. ☐ A change of power of attorney and/or address letter.16. ☒ Other items or information:

- a. ☒ Submittal of Drawings
- b. ☒ EXPRESS MAIL #EL538825831 US, dated June 28, 2000.

U.S. APPLICATION NO. (if known, see 37 C.F.R. 1.53)

09/582543

INTERNATIONAL APPLICATION NO.
PCT/EP98/08495ATTORNEY'S DOCKET NUMBER
P00,114717. ☒ The following fees are submitted:**BASIC NATIONAL FEE (37 C.F.R. 1.492(a)(1)-(5):**

Search Report has been prepared by the EPO or JPO \$840.00

International preliminary examination fee paid to USPTO (37 C.F.R. 1.482) .. \$700.00

No international preliminary examination fee paid to USPTO (37 C.F.R. 1.482) but
international search fee paid to USPTO (37 C.F.R. 1.445(a)(2)) \$770.00Neither international preliminary examination fee (37 C.F.R. 1.482) nor international
search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO \$1040.00International preliminary examination fee paid to USPTO (37 C.F.R. 1.482) and all
claims satisfied provisions of PCT Article 33(2)-(4) \$ 96.00**ENTER APPROPRIATE BASIC FEE AMOUNT =**

CALCULATIONS

PTO USE ONLY

\$ 840.00

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 months
from the earliest claimed priority date (37 C.F.R. 1.492(e)).

\$

Claims

Number Filed

Number
Extra

Rate

Total Claims

10 - 20 =

X \$ 18.00

\$

Independent Claims

2 - 3 =

X \$ 78.00

\$

Multiple Dependent Claims

\$260.00 +

\$

TOTAL OF ABOVE CALCULATIONS =

\$ 840.00

Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must
also be filed. (Note 37 C.F.R. 1.9, 1.27, 1.28)

\$

SUBTOTAL =

\$ 840.00

Processing fee of \$130.00 for furnishing the English translation later than ☐ 20 ☐ 30 months
from the earliest claimed priority date (37 CFR 1.492(f)).

\$

TOTAL NATIONAL FEE =

\$ 840.00

Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be
accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property

+

TOTAL FEES ENCLOSED =

\$ 840.00

Amount to be
refunded

\$

charged

\$

a. ☒ A check in the amount of \$ 840.00 to cover the above fees is enclosed.b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any
overpayment to Deposit Account No. 08-2290. A duplicate copy of this sheet is enclosed.NOTE: Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b)) must be
filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Hill & Simpson
A Professional Corporation
85th Floor Sears Tower
Chicago, Illinois 60606

SIGNATURE

Melvin A. Robinson
NAME31,870
Registration Number

09/582543

430 Rec'd PCT/PTO 28 JUN 2000

- 1 -

IN THE UNITED STATES ELECTED OFFICE
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
UNDER THE PATENT COOPERATION TREATY-CHAPTER II

"PRELIMINARY AMENDMENT"

5 APPLICANT: Karola SCHEIDIG

SERIAL NO.: EXAMINER:

FILING DATE: ART UNIT:

INTERNATIONAL APPLICATION NO.: PCT/EP98/08495

INTERNATIONAL FILING DATE: 29 December 1998

10 INVENTION: METHOD AND SYSTEM FOR CONTROLLING AN
OPERATOR INTERFACE WITH DISPLAY FIELDS
CONTAINING GRAPHICS AND TEXT

Hon. Assistant Commissioner for Patents
Box PCT

15 Washington D.C. 20231

SIR:

Amend the above-identified international application before entry into the
national stage before the U.S. Patent & Trademark Office under 35 U.S.C. §371
as follows:

20 **IN THE SPECIFICATION**

On page 1, before the title, insert --

SPECIFICATION

TITLE--;

after the title, insert --

BACKGROUND OF THE INVENTION

Field of the Invention--;

in line 5, before "invention" insert --present--;

5 after line 10, insert --

Description of the Related Art--.

On page 2, in line 10, before "WO 94/11801 A1" insert --Published
International Patent Application--;

10 in line 14, before "DE 195 18 367 A1" insert --German Patent Document--
;

in line 19, before "WO 94/27229 A1" insert --Published International
Patent Application--;

in line 20, delete "[sic]";

15 after line 22, insert --
SUMMARY OF THE INVENTION--; and

in line 24, before "invention" insert --present-- and replace "proposing"
with --providing--.

On page 3, in line 1, before "invention" insert --present--.

20 On page 4, in lines 9 and 10, delete "are defined in claim 6." and insert --
include a control panel program, which defines an operator interface on a screen,
whereby a plurality of display fields are provided on the operator interface, which
display fields respectively contain graphics elements and text, a graphics bitmap
stored for each display field, which graphics bitmap contains pixels corresponding
to the graphics element to be shown, a plurality of language versions stored in text

files for the text of each display field, one single language selected for the texts of all display fields depending on the input instruction, the graphics bitmap that belongs to every display field loaded into the main memory of the computer, and whereby text files of the selected language are accessed and text pixels and pixels of the graphics bitmap are represented together given the display of the display field.--;

after line 11, insert --

BRIEF DESCRIPTION OF THE DRAWINGS--;

in line 14, delete "Shown are:";

in line 16, after "Figure 1" insert --is a screen view of--;

in line 18, after "Figure 2" insert --is a screen view of--;

in line 22, after "Figure 3" insert --is a diagram-- and after "schematically" insert --showing--;

in line 24, after "Figure 4" insert --is a pair of--;

after line 25, insert --

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS--;

and

in line 29, after "TFT" insert --(thin film transistor)--.

On page 5, in line 8, delete "respectively" and insert --that--;

in line 13, before "display" insert --in--;

in line 15, before "display" insert --in--; and

in line 19, change "displays 28, 30, 32," to --displays 28, 30 and 32,--.

On page 6, in lines 4 and 5, delete "comfort is therefore reduced for the operator" and insert --operator may not be comfortable with the display--.

On page 7, after line 9, add the following new paragraph --

Although other modifications and changes may be suggested by those skilled in the art, it is the intention of the inventors to embody within the patent warranted hereon all changes and modifications as reasonably and properly come
5 within the scope of their contribution to the art.--.

Delete page 8.

IN THE CLAIMS

On page 9, line 1, change "Claims" to --I Claim:--.

Amend claim 1 as follows:

10 1. (Amended) A method [Method] for [purposes of] controlling an operator interface of a computer-controlled system, [particularly of a high-performance printer,] comprising the steps of:
processing [whereby a computer processes] a control panel program by a
computer, said control panel program defining [which defines] an operator
15 interface on a screen [(10)], [whereby]
providing a plurality of display fields [(12 - 26) are provided] on the operator interface, said plurality of [which] display fields [respectively] containing graphics elements and text,
storing [whereby] a graphics bitmap [,] which contains pixels corresponding to
20 the graphics element to be represented [, is stored] for each of said
plurality of display fields [(12 - 26)],
storing a plurality of language versions [are stored] in text files [(for example No. 302)] for the text of each of said plurality of display fields [(12 - 26)],
selecting one single language [is selected] for the texts of all of said plurality of
25 display fields [(12 - 26)] depending on an [the] input instruction,

loading the graphics bitmap that belongs to every one of said plurality of display fields [(12 - 26) is loaded] into a [the] main memory of the computer, accessing [and whereby] text files of the [chosen] language selected in said selecting step, [are accessed] and

5 representing text pixels and pixels of the graphics bitmap [are represented] together given [the] display of the corresponding display field [(12 - 26)].

2.(Amended) A method [Method] according to claim 1, further comprising the steps of: [characterized in that,]
storing the graphics bitmaps [are stored] in a ROM component, and [,]
10 when a menu of the operator interface is called, loading all graphics bitmaps of the called [this] menu [are loaded] into the main memory and retaining the graphics bitmaps in the main memory [remain there] as long as the display fields are required for the menu and for further menus.

3.(Amended) A method [Method] according to claim 1 [or 2], further comprising the steps of: [characterized in that,]
utilizing a sensor screen [is utilized] as a screen, [(10)] and [in that]
15 branching the control panel program [branches] into an input menu when one of the display fields [(12 - 26)] are touched, [in which] the input menus accepting [the] user inputs bits of information.

4.(Amended) A method [Method] according to claim 3, further comprising the steps of: [characterized in that,]
proceeding from an initial menu, calling an application-submenu [is called] by
[means of] operating a display field,
20 selecting [in which] the language in the application-submenu [is selected].

5. (Amended) A method [Method] according to claim 1, further comprising the steps of: [one of the previous claims, characterized in that,]
reading out the new text [is read out] from the appertaining text file, and
displaying the text that was read out [is displayed] instead of the previous text
5 without changing the graphics bitmap of the appertaining display field
given a change of the language.

6. (Amended) A system [System] for [purposes of] controlling an operator
interface of a personal computer having a screen and a main memory, comprising:
[particularly in a high-performance printer, whereby the personal computer
processes]
10 a control panel program [,] which defines an operator interface on a screen [(10)],
[whereby]
a plurality of display fields [(12 - 26) are] provided on the operator interface, said
[which] display fields [(12 - 26) respectively] containing graphics
elements and text, [whereby]
15 a graphics bitmap [is stored] for each display field [(12 - 26)], said [which]
graphics bitmap containing [contains] pixels corresponding to the graphics
element to be shown,
a plurality of language versions [are] stored in text files [(for example No. 302)]
20 for the text of each display field [(12 - 26)],
means for receiving an input instruction to select one single language [is selected]
for the texts of all display fields [(12 - 26) depending on the input
instruction],
the graphics bitmap that belongs to every display field being [(12 - 26) is] loaded
25 into the main memory of the computer,
and [whereby] text files of the selected language being [are] accessed and

[whereby] text pixels and pixels of the graphics bitmap being [are] represented together given the display of the display field [(12 - 26)].

7.(Amended) A system [System] according to claim 6, further comprising:
[characterized in that, the graphics bitmaps are stored in]
5 a ROM component in which the graphics bitmaps are stored and [that all]
the main memory loading and retaining the graphics bitmaps of the [this] menu
[are loaded into the main memory and remain there] as long as the display
fields are required for the menu and for further menus given a call of a
menu of the operator interface.

8.(Amended) A system [System] according to claim 6 [or 7, characterized
in that], further comprising:
a sensor screen [is utilized] as a screen, [(10)] and [in that]
the control panel program branching [branches] into an input menu, said input
15 menu accepting [in which the] user inputs information [,] when one of
the display fields [(12 - 26)] are touched.

9. (Amended) A system [System] according to claim 8, further
comprising: [characterized in that, proceeding from]
20 an output menu leading to [,] an application-submenu [is] called by [means of]
operating a display field [,] in which the language is selected.

10. (Amended) A system [System] according to claim [one of the previous
claims] 6 [through 9], further comprising: [characterized in that, the]
25 a graphics bitmap displayed with new text [is] read out from the appertaining text
file and [is] displayed instead of the previous text without changing the

graphics bitmap of the appertaining display field given a change of the language.

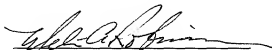
IN THE ABSTRACT

5 Add a new abstract as shown on the attached separate sheet.

REMARKS

10 The foregoing amendments to the specification and claims under Article 41 of the Patent Cooperation Treaty place the application into a form for prosecution before the U.S. Patent and Trademark Office under 35 U.S.C. §371. Accordingly, entry of these amendments before examination on the merits is hereby requested.

15 Respectfully submitted,



20 Melvin A. Robinson (reg. no. 31,870)
Hill & Simpson
A Professional Corporation
85th Floor Sears Tower
Chicago, Illinois 60606
Telephone: 312-876-0200 ext. 3044

25 ATTORNEY FOR APPLICANT

ABSTRACT OF THE DISCLOSURE

A method and system for displaying an operator interface on a computer includes graphic elements with text portions. A language is selected by a user and the graphic elements are displayed with text portions in the selected language.

5 The text portions in the selected language are provided by displaying pixels of the text from a text file with pixels of the corresponding graphic from a graphic image file.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

7/PRB

09/582543

430 Rec'd PCT/PTO 2 8 JUN 2000

METHOD AND SYSTEM FOR CONTROLLING AN OPERATOR
INTERFACE WITH DISPLAY FIELDS CONTAINING GRAPHICS AND
TEXT

5 The invention relates to a method for controlling an operator interface of a computer-
controlled system, particularly of a high-performance printer, whereby a computer
processes a control panel program, which defines an operator interface on a monitor,
whereby a plurality of display fields are provided on the operator interface, which
display fields respectively contain graphics elements and text. Further, the invention
10 relates to a system for purposes of controlling such an operator interface.

15 In order to facilitate the operation of a computer-controlled system, for example of a
high-performance printer, display fields, apart from an explanatory symbol for a
function, also contain an explanatory text. While the graphics in these display fields
can be kept for countries of different language, it is expedient, for a better
understanding, to provide the text in the respective language. In the prior art, a bitmap
is prepared for each display field, which bitmap defines pixels corresponding to the
display image to be displayed together with the text and is stored upon request. When
the computer-controlled system is sold in many countries of world, an extremely great
20 number of bitmaps must be available, which contain the multilingual texts. Therefore,
large memory requirements are necessary for such a solution. Another disadvantage
is that it takes relatively long for an image to be build up within a display field given
the currently normal relatively high pixel density, although the processors are fast, so
that the user experiences less comfort with respect to the menu prompting.

25 An image output device is known from "Patent Abstracts of Japan" with the
publication number JP 07164685 A, whereby bits of information are displayed on a
LCD-display. Menu texts that are present in a plurality of language versions are

selected by means of a switching unit and are displayed on the display. The size of the display is adjusted dependent on the selected language.

"IMB Technical Disclosure Bulletin", vol. 37, No. 065, June 1994, page 461 through 463 discloses a method for controlling an operator interface, whereby an operator can select a language among texts in a plurality of languages after a system has been started. The selected language is displayed in a window, which displays further bits of information about an application program.

WO 94/11804 A1 describes an "user interface", which displays status information of a printer. Texts to be displayed are provided in files. A computer-supported sequencer accesses these text files in order to display these.

DE 195 18 367 A1 describes a method for storing and playing back a supply of fixed screen texts. The operator can be guided by means of the screen texts in a plurality of languages. Text parts that are language-independent are combined with language-dependent variable texts in order to be able to display a complete text on the screen.

Further, WO 94/27229 A1 describes an operator interface, whereby text elements or [sic] graphic elements are simultaneously displayed on a screen. Text parts and graphics parts can be stored in different areas and are combined given the representation on the screen.

The invention is based on the object of proposing a method and a system for controlling an operator interface, whereby the graphics elements and texts in different languages to be displayed in the display fields are built up fast and whereby the memory requirements are low.

The invention proposes a method for purposes of controlling an operator interface of a computer-controlled system, whereby a computer processes a control panel program, which defines an operator interface on a screen, whereby a plurality of display fields are provided on the operator interface, which respectively contain graphics elements and text, whereby a graphics bitmap is stored for each display field, which graphics bitmap contains pixels corresponding to the graphics element to be displayed; a plurality of language versions are stored in text files for the text of each display field; one single language is selected for the texts of all display fields depending on an input instruction; the graphics bitmap that belongs to every display field is loaded into the main memory of the computer; text files of the selected language are accessed; and text pixels and pixels of the graphics bitmap are represented together given the display of the display field.

According to the invention, the pixels that are to be displayed in total in the display field are divided. On one hand, the pixels are defined by means of a graphics bitmap that does not contain text pixels but only graphics elements. Other pixels that belong to the texts are generated by means of the graphics controller to which the respective text is supplied. This text is stored in a plurality of languages in a plurality of text files. When a specific language is now selected, the pixels of the graphics bitmap are displayed in the display field and the text pixels are added according to the selected text file. Therefore, merely one graphics bitmap, whose pixels are combined with the pixels of the selected language of the text, must be provided for each display field. When the control panel program is activated and a language change is made, merely a new text file with the corresponding language must be accessed - the graphics bitmap can be kept. Thus, the image buildup for a display field is also accelerated, since merely the pixels of the text must be combined with the already present pixels of the graphics bitmap.

In a preferred exemplary embodiment of the invention, the graphics bitmaps are stored in a ROM-component. Given a call of a menu of the operator interface, all graphics bitmaps of this menu are loaded into the main memory and remain there as long as the display fields are needed for the menu and for further menus. When the language is changed, loading processes are thus foregone for the graphics bitmaps and the image buildup can be speeded up.

According to a further aspect of the invention, a system for purposes of controlling an operator interface of a computer-controlled system is proposed, whose features are defined in claim 6. The advantages that have already been described in connection with the inventive method derive as a result of this system.

The invention is subsequently further explained upon reference to the drawing.
Shown are:

- Figure 1 a traditional operator interface with texts in the English language,
- Figure 2 a similar operator interface, whereby the display fields still contain texts in the English language, but the further texts are in the German language,
- Figure 3 schematically the editing of text files and graphics data, and
- Figure 4 flowcharts for the program start of the control panel program and for the language changeover.

Figure 1 schematically shows a screen 10, on which a control panel program generates an operator interface. The screen 10 is fashioned as TFT display, i.e. that it is a LCD

screen, whereby the individual pixels are driven by means of vapor-deposited transparent horizontal and vertical interconnects. The thin film transistors (TFT) that are additionally arranged for each pixel at the cross points purposefully switch-on and switch-off the electrical fields for the polarisation of the anisotropic liquid. Optical highly qualitative images can be generated in this way.

Display fields 12 through 26 are present in a first row of the screen 10, which display fields respectively contain a graphics element and text. The screen 10 is further fashioned as a sensor screen, i.e. that touch-sensors are disposed under the display fields 12 through 26, which touch-sensors recognize the touching by means of a pen or a finger. Given operating of one of the display fields 12 through 26, the control panel program branches into a corresponding menu, in which the operator can input different parameters, in which bits of information are displayed (display field 24) or via which the computer-controlled system - a high-performance printer in the present case - can be switched in the off-state (display field 26). The display fields 12 through 26 contain symbols as graphics elements, which symbols indicate the function of the menu called by the control panel program.

Rectangular displays 28, 30, 32, which exclusively contain texts, are provided below the display fields 12 through 26. Further, a text field 34 is displayed, which indicates the status of the high-performance printer. A parameter field 36, which shows operating parameters, is provided in the lower image part of the screen 10. As can be seen from Figure 1, all texts that are shown at the screen are in English. However, it is desirable that the texts to be displayed are in the language of the location depending on the location where the high-performance printer is installed.

Figure 2 shows a version of the operator interface, whereby the texts are displayed in German in the sections 28 through 36. Such a representation is relatively simple to manage, since the display of texts can be managed relatively fast with the aid of the

graphics controller, whereby corresponding text files are accessed. However, it can be recognized that the text elements in the display fields 12 through 26 are still in the English language, since it is relatively difficult to only modify the text portion in images with graphics elements. Given a display according to Figure 2, the comfort is therefore reduced for the operator, since he must read the menu in two languages.

In the left image part, Figure 3 shows the editing of text files with different languages. Each text file with identical bits of information, for example with the term "paper" receives the same access number, 302 for example. When the operator selects a language, for example English or German, the text file of the same number - the number 302 in the present case - is accessed and this text is represented in the display field together with the graphics. It can be recognized in the right image part that the text "paper" is faded-in from the corresponding text file with the number 302 with respect to the graphics part, which shows a paper web given the selected language English. The display field with the language German can be seen therebelow. The text file with the number 302 is also accessed. As a result of the fixed language German, the term "Papier" is now displayed on the display field. It is to be noted that the graphics part need not be reloaded but remains unchanged. Merely the respective text in the chosen language is faded-in.

Figure 4 shows flowcharts given the program start and given a change of the language. According to step 40, the texts are initially loaded into the main memory corresponding to the selected language 1. Subsequently, the graphics bitmaps for the different display fields are loaded (step 42) and all display fields are displayed on the screen (step 44), i.e. that texts and graphics bitmaps are superimposed and are represented together.

The right image part shows process steps 50 through 54, as they are applied when the language is changed. For example, it is changed from the language 1 to the language

2 in the step 50. This changing ensues by means of inputs of the user after the application menu has been called, i.e. that an application menu is called after the display field 22 has been touched and the application menu is branched into a language changeover menu from there. According to step 52, the texts of the newly selected language stored in the text files are loaded into the main memory. After these texts have been transformed into pixels by means of the graphics controller, they are displayed together with the graphics bitmaps, which were still kept in the main memory, whereby the windowing technique is applied for the representation in general.

10
 $\begin{pmatrix} p_1 \\ p_2 \\ p_3 \\ p_4 \\ p_5 \\ p_6 \\ p_7 \\ p_8 \\ p_9 \\ p_{10} \\ p_{11} \\ p_{12} \\ p_{13} \\ p_{14} \\ p_{15} \\ p_{16} \\ p_{17} \\ p_{18} \\ p_{19} \\ p_{20} \\ p_{21} \\ p_{22} \\ p_{23} \\ p_{24} \\ p_{25} \\ p_{26} \\ p_{27} \\ p_{28} \\ p_{29} \\ p_{30} \\ p_{31} \\ p_{32} \\ p_{33} \\ p_{34} \\ p_{35} \\ p_{36} \\ p_{37} \\ p_{38} \\ p_{39} \\ p_{40} \\ p_{41} \\ p_{42} \\ p_{43} \\ p_{44} \\ p_{45} \\ p_{46} \\ p_{47} \\ p_{48} \\ p_{49} \\ p_{50} \\ p_{51} \\ p_{52} \\ p_{53} \\ p_{54} \\ p_{55} \\ p_{56} \\ p_{57} \\ p_{58} \\ p_{59} \\ p_{60} \\ p_{61} \\ p_{62} \\ p_{63} \\ p_{64} \\ p_{65} \\ p_{66} \\ p_{67} \\ p_{68} \\ p_{69} \\ p_{70} \\ p_{71} \\ p_{72} \\ p_{73} \\ p_{74} \\ p_{75} \\ p_{76} \\ p_{77} \\ p_{78} \\ p_{79} \\ p_{80} \\ p_{81} \\ p_{82} \\ p_{83} \\ p_{84} \\ p_{85} \\ p_{86} \\ p_{87} \\ p_{88} \\ p_{89} \\ p_{90} \\ p_{91} \\ p_{92} \\ p_{93} \\ p_{94} \\ p_{95} \\ p_{96} \\ p_{97} \\ p_{98} \\ p_{99} \end{pmatrix}$

$t_{2,1}$

Reference character list

10	screen
12 -26	display fields
28 - 32	displays
34	text field
36	parameter field
40 - 54	method steps

Claims

1. Method for purposes of controlling an operator interface of a computer-controlled system, particularly of a high-performance printer,

whereby a computer processes a control panel program, which defines an operator interface on a screen (10), whereby a plurality of display fields (12 - 26) are provided on the operator interface, which display fields respectively contain graphics elements and text,

whereby a graphics bitmap, which contains pixels corresponding to the graphics element to be represented, is stored for each display field (12 - 26),

a plurality of language versions are stored in text files (for example No. 302) for the text of each display field (12 - 26),

one single language is selected for the texts of all display fields (12 - 26) depending on the input instruction,

the graphics bitmap that belongs to every display field (12 - 26) is loaded into the main memory of the computer,

and whereby text files of the chosen language are accessed and text pixels and pixels of the graphics bitmap are represented together given the display of the display field (12 - 26).

2. Method according to claim 1, characterized in that,

the graphics bitmaps are stored in a ROM component and, when a menu of the operator interface is called, all graphics bitmaps of this menu are loaded into the main memory and remain there as long as the display fields are required for the menu and for further menus.

3. Method according to claim 1 or 2,
characterized in that,

a sensor screen is utilized as a screen (10) and in that the control panel program branches into an input menu when one of the display fields (12 - 26) are touched, in which input menus the user inputs bits of information.

4. Method according to claim 3,
characterized in that,

proceeding from an initial menu, an application-submenu is called by means of operating a display field, in which the language is selected.

5. Method according to one of the previous claims,
characterized in that,

the new text is read out from the appertaining text file and is displayed instead of the previous text without changing the graphics bitmap of the appertaining display field given a change of the language.

6. System for purposes of controlling an operator interface of a personal computer, particularly in a high-performance printer,

whereby the personal computer processes a control panel program, which defines an operator interface on a screen (10), whereby a plurality of display fields (12 - 26) are provided on the operator interface, which display fields (12 - 26) respectively contain graphics elements and text,

whereby a graphics bitmap is stored for each display field (12 - 26), which graphics bitmap contains pixels corresponding to the graphics element to be shown,

a plurality of language versions are stored in text files (for example No. 302) for the text of each display field (12 - 26),

one single language is selected for the texts of all display fields (12 - 26) depending on the input instruction,

the graphics bitmap that belongs to every display field (12 - 26) is loaded into the main memory of the computer,

and whereby text files of the selected language are accessed and whereby text pixels and pixels of the graphics bitmap are represented together given the display of the display field (12 - 26).

7. System according to claim 6,
characterized in that,

the graphics bitmaps are stored in a ROM component and that all graphics bitmaps of this menu are loaded into the main memory and remain there as long as the display fields are required for the menu and for further menus given a call of a menu of the operator interface.

8. System according to claim 6 or 7,

characterized in that,

a sensor screen is utilized as a screen (10) and in that the control panel program branches into an input menu, in which the user inputs information, when one of the display fields (12 - 26) are touched.

9. System according to claim 8,
characterized in that,
proceeding from an output menu, an application-submenu is called by means of
operating a display field, in which the language is selected.

5

10. System according to one of the previous claims 6 through 9,
characterized in that,
the new text is read out from the appertaining text file and is displayed instead of the
previous text without changing the graphics bitmap of the appertaining display field
given a change of the language.

10

15

20



DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION
ERKLÄRUNG FÜR PATENTANMELDUNGEN MIT VOLLMACHT
German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:

dass mein Wohnsitz, meine Postanschrift, und meine Staatsangehörigkeit den im Nachstehenden nach meinem Namen aufgeführten Angaben entsprechen,

dass ich, nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für des dieser Antrag gestellt wird und für den ein Patent beantragt wird für die Erfindung mit dem Titel:

VERFAHREN UND SYSTEM ZUM STEUERN EINER
BEDIENEROBERFLÄCHE MIT GRAFIK UND TEXTE
ENTHALTENDEN ANZEIGEFELDERN

deren Beschreibung

(zutreffendes ankreuzen)

☐ hier beigelegt ist.

☒ am 29 December 1998 als
 PCT internationale Anmeldung
 PCT Anmeldungsnummer PCT/EP98/08495
 eingereicht wurde und am _____
 abgeändert wurde (falls tatsächlich abgeändert)

Ich bestätige hiermit, dass ich den Inhalt der obigen Patentanmeldung einschliesslich der Ansprüche durchgesehen und verstanden habe, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurde

Ich erkenne meine Pflicht zur Offenbarung irgendwelcher Informationen, die für die Prüfung der vorliegenden Anmeldung in Einklang mit Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) von Wichtigkeit sind, an.

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäss Abschnitt 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 119 aller unten angegebenen Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde, und habe auch alle Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde nachstehend gekennzeichnet, die ein Anmeldedatum haben, das vor dem Anmeldedatum der Anmeldung liegt, für die Priorität beansprucht wird.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD AND SYSTEM FOR CONTROLLING AN
OPERATOR INTERFACE WITH DISPLAY FIELDS
CONTAINING GRAPHICS AND TEXT

the specification of which

(check one)

☐ is attached hereto

☒ was filed on 29 December 1998 as
 PCT international application
 PCT Application No. PCT/EP98/08495
 and was amended on _____
 (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

German Language Declaration

Prior foreign applications

Priorität beansprucht

Priority Claimed

197 58 029 7 Germany 29 December 1997
 (Number) (Country) (Day Month Year Filed)
 (Nummer) (Land) (Tag Monat Jahr eingereicht)

(Number) (Country) (Day Month Year Filed)
 (Nummer) (Land) (Tag Monat Jahr eingereicht)

☒ ☐
 Yes No
 Ja Nein

☐ ☐
 Yes No
 Ja Nein

Ich beanspruche hiermit gemäss Absatz 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 120, den Vorzug aller unten aufgeführten Anmeldungen und falls der Gegenstand aus jedem Anspruch dieser Anmeldung nicht in einer früheren amerikanischen Patentanmeldung laut dem ersten Paragraphen des Absatzes 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 122 offenbart ist, erkenne ich gemäss Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) meine Pflicht zur Offenbarung von Informationen an, die zwischen dem Anmeldedatum der früheren Anmeldung und dem nationalen oder PCT internationalen Anmeldedatum dieser Anmeldung bekannt geworden sind.

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §122 I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

(Application Serial No.)
 (Anmeldeseriennummer)

(Filing Date)
 (Anmeldedatum)

(Status)
 (patentiert, anhängig,
 aufgegeben)

(Status)
 (patented, pending,
 abandoned)

(Application Serial No.)
 (Anmeldeseriennummer)

(Filing Date)
 (Anmeldedatum)

(Status)
 (patentiert, anhängig,
 aufgegeben)

(Status)
 (patented, pending,
 abandoned)

Ich erkläre hiermit, dass alle von mir in der vorliegenden Erklärung gemachten Angaben nach meinem besten Wissen und Gewissen der vollen Wahrheit entsprechen, und dass ich diese eidesstattliche Erklärung in Kenntnis dessen abgebe, dass wissentlich und vorsätzlich falsche Angaben gemäss Paragraph 1001, Absatz 18 der Zivilprozessordnung der Vereinigten Staaten von Amerika mit Geldstrafe belegt und/oder Gefängnis bestraft werden können, und dass derartig wissentlich und vorsätzlich falsche Angaben die Gültigkeit der vorliegenden Patentanmeldung oder eines darauf erteilten Patentes gefährden können.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such wilful false statements may jeopardize the validity of the application or any patent issued thereon.

German Language Declaration

VERTRETUNGSVOLLMACHT: Als benannter Erfinder beauftrage ich hiermit den nachstehend benannten Patentanwalt (oder die nachstehend benannten Patentanwälte) und/oder Patent-Agenten mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Geschäfte vor dem Patent- und Warenzeichenamt: (Name und Registrationsnummer anführen)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

And I hereby appoint Messrs.

John D. Simpson (Registration No. 19,842), Dennis A. Gross (24,410), Robert M. Barrett (30,142), Steven H. Noll (28,982), Kevin W. Guynn (29,927), Robert M. Ward (26,517), Brett A. Valiquet (27,841), Edward A. Lehman (22,312), David R. Metzger (32,919), Todd S. Parkhurst (26,494), James D. Hobart (24,149), Melvin A. Robinson (31,870), John R. Garrett (27,888), Joseph P. Reagan (35,332), Michael R. Hull (35,902), Michael S. Leonard (37,557), William E. Vaughan (39,056) and Lewis T. Steadman (17,074) all members of the firm of Hill & Simpson, A Professional Corporation

Telefongespräche bitte richten an:
(Name und Telefonnummer)

Direct Telephone Calls to: (name and telephone number)

312/876-0200

Ext. 3491

Postanschrift:

Send Correspondence to:

HILL & SIMPSON
A Professional Corporation
85th Floor Sears Tower, Chicago, Illinois 60606

Vater Name des einzigen oder ursprünglichen Erfinders: Karola SCHEIDIG	Full name of sole or first inventor:
Unterschrift des Erfinders <i>Karola Scheidig</i>	Inventor's signature Datum
Wohnort: Grünteggenbach Pfaffing, Germany	Residence
Staatsangehörigkeit: German	Citizenship
Postanschrift: Herdweg 2 B	Post Office Address
84405 Grünteggenbach D-85652 Pfaffing, GERMANY	

(Bitte entsprechende Informationen und Unterschriften im Falle von weiteren Miterfindern angeben).

(Supply similar information and signature for subsequent joint inventors).

geändert 23.6.00

Karola Scheidig
Page 3 of 3